

RECEIVED
SEP 17 2002
FBI/DO MAIL ROOM
COPY OF PAPERS
ORIGINALLY FILED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute form 1449A/PTO				Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/932,196		
				Filing Date	August 17, 2001		
				First Named Inventor	H. Holden Thorn		
				Group Art Unit	1741		
				Examiner Name	Unknown		
Sheet	1	of	2	Attorney Docket Number	5470.277		
U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number	Kind Code (if known)				
[Signature]	1	6,128,214		Kuekes et al.	10/03/2000		
	2	6,256,767		Kuekes et al.	07/03/2001		
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office	Number	Kind Code (if known)			
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published					
[Signature]	3	Adleman, Leonard M., <i>Molecular Computation of Solutions to Combinatorial Problems</i> , <u>Science</u> , Vol. 266, pp. 1021-1024 (11 November 1994)					
[Signature]	4	Beckman, Kenneth B., et al., <i>Oxidative Decay in DNA</i> , <u>The Journal of Biological Chemistry</u> , Vol. 272, No. 32, pp. 19633-19636 (August 8, 1997)					
[Signature]	5	Chao, Shuchi, et al., <i>Solid-State Microelectrochemistry: Electrical Characteristics of a Solid-State Microelectrochemical Transistor Based on Poly(3-methylthiophene)</i> , <u>J. Am. Chem. Soc.</u> , Vol. 109, pp. 2197-2199 (1987)					
[Signature]	6	Dickinson, Enders, et al., <i>Effect of Position of Polyether Attachment on the Electron Self-Exchange Activation Barrier Energies of Redox Polyether Hybrid Molten Salts</i> , <u>J. Phys. Chem. B</u> , Vol. 103, pp. 11028-11035 (1999)					
[Signature]	7	Dickinson, Enders, et al., <i>Hybrid Redox Polyether Melts Based on Polyether-Tailed Counterions</i> , <u>J. Am. Chem. Soc.</u> , Vol. 121, pp. 613-616 (1999)					
[Signature]	8	Elghanian, Robert, et al., <i>Selective Colorimetric Detection of Polynucleotides Based on the Distance-Dependent Optical Properties of Gold Nanoparticles</i> , <u>Science</u> , Vol. 277, pp. 1078-1081 (22 August 1997)					
[Signature]	9	Fink, Hans-Werner, et al., <i>Electrical conduction through DNA molecules</i> , <u>Nature</u> , Vol. 298, pp. 407-410 (1 April 1999)					
[Signature]	10	Hall, Daniel B., et al., <i>Oxidative DNA damage through long-range electron transfer</i> , <u>Nature</u> , Vol. 382, pp. 731-735 (22 August 1996)					
[Signature]	11	Henle, Ernst S., et al., <i>Formation, Prevention, and Repair of DNA Damage by Iron/Hydrogen Peroxide</i> , <u>The Journal of Biological Chemistry</u> , Vol. 272, No. 31, pp. 19095-19098 (August 1, 1997)					
[Signature]	12	Hopfield, J.J., et al., <i>A Molecular Shift Register Based on Electron Transfer</i> , <u>Science</u> , Vol. 241, pp. 817-820 (12 August 1988)					
[Signature]	13	Johnston, Dean H., et al., <i>Cyclic Voltammetry Studies of Polynucleotide Binding and Oxidation by Metal Complexes: Homogeneous Electron-Transfer Kinetics</i> , <u>J. Phys. Chem.</u> , Vol. 100, pp. 13837-13843 (1996)					
[Signature]	14	Johnston, Dean H., et al., <i>Electrochemical Measurement of the Solvent Accessibility of Nucleobases Using Electron Transfer between DNA and Metal Complexes</i> , <u>J. Am. Chem. Soc.</u> , Vol. 117, pp. 8933-8938 (1995)					
[Signature]	15	Johnston, Dean H., et al., <i>Trans-Dioxorhenium (V)-Mediated Oxidation at Indium Tin-Oxide Electrodes: Voltammetric Detection of DNA Cleavage in Solution</i> , <u>Inorg. Chem.</u> , Vol. 33, pp. 6388-6390 (1994)					
[Signature]	16	Jortner, Joshua, et al., <i>Charge transfer and transport in DNA</i> , <u>Proc. Natl. Acad. Sci. USA</u> , Vol. 95, pp. 12759-12765 (October 1998)					
[Signature]	17	Leone, Anthony M., et al., <i>An Ionic Liquid Form of DNA: Redox-Active Molten Salts of Nucleic Acids</i> , <u>J. Am. Chem. Soc.</u> , Vol. 123, No. 2, pp. 218-222 (2001)					
[Signature]	18	Lewis, Frederick D., et al., <i>Distance-Dependent Electron Transfer in DNA Hairpins</i> , <u>Science</u> , Vol. 277, pp. 673-676 (1 August 1997)					
[Signature]	19	Lewis, Frederick D., et al., <i>Direct measurement of hole transport dynamics in DNA</i> , <u>Nature</u> , Vol. 406, pp. 51-53 (6 July 2000)					
[Signature]	20	Manning, Gerald S., <i>The Molecular theory of polyelectrolyte solutions with applications to the electrostatic properties of polynucleotides</i> , <u>Quarterly Reviews of Biophysics II</u> , Vol. 2, pp. 179-246 (1978)					
[Signature]	21	Meggers, Eric, et al., <i>Sequence Dependent Long Range Hole Transport in DNA</i> , <u>J. Am. Chem. Soc.</u> , Vol. 120, pp. 12950-12955 (1998)					
Examiner Signature		[Signature]			Date Considered	10/27/04	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 2

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
yz	22	Mirkin, Chad A., et al., <i>Semiconductors meet biology</i> , <i>Nature</i> , Vol. 405, pp. 626-627 (8 June 2000)	.
yz	23	Mirkin, Chad A., <i>Programming the Assembly of Two- and Three-Dimensional Architectures with DNA and Nanoscale Inorganic Building Blocks</i> , <i>Inorg. Chem.</i> , Vol. 39, pp. 2258-2272 (2000)	.
yz	24	Okahata, Yoshio, et al., <i>Anisotropic Electric Conductivity in an Aligned DNA Cast Film</i> , <i>J. Am. Chem. Soc.</i> , Vol. 102, pp. 6165-6166 (1998)	.
yz	25	Payti, Radha, et al., <i>Voltammetry and Conductivity of a Polyether Pyridinium Room Temperature Molten Salt Electrolyte and of Its Polymer Electrolyte Solutions in Polydimethylsiloxane</i> , <i>J. Electrochem. Soc.</i> , Vol. 143, No. 2, pp. 401-405 (February 1996)	.
yz	26	Pirrung, Michael C., et al., <i>The Arrayed Primer Extension Method for DNA Microchip Analysis. Molecular Computation of Satisfaction Problems</i> , <i>J. Am. Chem. Soc.</i> , Vol. 122, pp. 1873-1882 (2000)	.
yz	27	Porath, Danny, et al., <i>Direct Measurement of electrical transport through DNA molecules</i> , <i>Nature</i> , Vol. 403, pp. 635-638 (2000)	.
yz	28	Record, Jr., M. Thomas, et al., <i>Thermodynamic analysis of ion effects on the binding and conformational equilibria of proteins and nucleic acids: the roles of ion association or release, screening, and ion effects on water activity</i> , <i>Quarterly Reviews of Biophysics II</i> , Vol. II, pp. 103-178 (1978)	.
yz	29	Ritchie, Jason E., et al., <i>Intermolecular Optical Electron Transfer in Polyether Hybrid Molten Salts of Mixed-Valent Ruthenium Complexes</i> , <i>J. Am. Chem. Soc.</i> , Vol. 122, pp. 2964-2965 (2000)	.
yz	30	Saito, Isao, et al., <i>Photoinduced DNA Cleavage via Electron Transfer: Demonstration That Guanine Residues Located 5' to Guanine Are the Most Electron-Donating Sites</i> , <i>J. Am. Chem. Soc.</i> , Vol. 117, pp. 6406-6407 (1995)	.
yz	31	Schuster, Gary B., <i>Long-Range Charge Transfer in DAN: Transient Structural Distortions Control the Distance Dependence</i> , <i>Acc. Chem. Res.</i> , Vol. 33, No. 4, pp. 253-260 (2000)	.
yz	32	Williams, Mary Elizabeth, et al., <i>Electron and Mass Transport in Hybrid Redox Polyether Melts: Co and Fe Bipyridines with Attached Polyether Chains</i> , <i>J. Am. Chem. Soc.</i> , Vol. 119, pp. 1997-2005 (1997)	.

RECEIVED
FEB 14 2003
TC 1700

RECEIVED
MAR 19 2003
TC 1700

Examiner Signature	<i>max fawcett</i>	Date Considered	10/27/04
--------------------	--------------------	-----------------	----------

*EXAMINER: Initial if reference considered, (whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.